BRAIN RESEARCH

VOL. 745 NOS. 1,2 **CONTENTS** **16 JANUARY 1997**

Cited in Biological Abstracts (BIOSIS) – Chem. Abstracts – Index Medicus (MEDLINE) – Current Contents (Life Sci.) – Excerpta Medica (EMBASE) – Psychological Abstracts (PsycINFO) – Pascal et Francis (INIST-CNRS) – RIS (Reference Update) – Current Awareness in Biological Science (CABS)

Publisher's Note v

Guidelines for the submission of manuscripts vii

Research reports

Low-affinity sulfonylurea binding sites reside on neuronal cell bodies in the brain
A.A. Dunn-Meynell, V.H. Routh, J.J. McArdle and B.E. Levin (USA) 1

[^{125}I]4-Aminobenzyl-5′-*N*-methylcarboxamidoadenosine ([^{125}I]AB-MECA) labels multiple adenosine receptor subtypes in rat brain
L.P. Shearman and D.R. Weaver (USA) 10

The association of tissue transglutaminase with human recombinant tau results in the formation of insoluble filamentous structures
D.M. Appelt and B.J. Balin (USA) 21

Ganglioside composition of the human cranial nerves, with special reference to pathophysiology of Miller Fisher syndrome
A. Chiba, S. Kusunoki, H. Obata, R. Machinami and I. Kanazawa (Japan) 32

The effect of estradiol-induced hypothalamic pathology on sulfated glycoprotein-2 (clusterin) expression in the hypothalamus
K.M. Wener, C.R. Morales and J.R. Brawer (Canada) 37

Activation of metabotropic glutamate receptors increases endogenous protein kinase C substrate phosphorylation in adult hippocampal slices
F. Angenstein, M. Hirschfelder and S. Staak (Germany) 46

Whole-cell NMDA-evoked current in suprachiasmatic neurones of the rat: modulation by extracellular calcium ions
S. Alberi, M. Dubois-Dauphin, J.J. Dreifuss and M. Raggenbass (Switzerland) 55

Subcellular localization of neuronal nitric oxide synthase in the brain of a teleost; an immunoelectron and confocal microscopical study
B. Holmqvist and P. Ekström (Norway, Sweden) 67

Contribution of sacral spinal cord neurons to the autonomic and somatic consequences of withdrawal from morphine in the rat
D.S. Rohde, W.R. McKay, C. Abbadie and A.I. Basbaum (USA) 83

Autoradiographic localization of 5-HT$_{1A}$ receptors in the post-mortem human brain using [^{3}H]WAY-100635 and [^{11}C]WAY-100635
H. Hall, C. Lundkvist, C. Halldin, L. Farde, V.W. Pike, J.A. McCarron, A. Fletcher, I.A. Cliffe, T. Barf, H. Wikström and G. Sedvall (Sweden, UK, The Netherlands) 96

The contribution of endogenous mono-ADP-ribosylation to kindling-induced epileptogenesis
K. Suzuki, H. Iwasa, S. Kikuchi, T. Sato, M. Miyake, N. Morinaga and M. Noda (Japan) 109

Effects of NMDA-R1 antisense oligodeoxynucleotide administration: behavioral and radioligand binding studies
A. Zapata, J.L. Capdevila, G. Tarrason, J. Adan, J.M. Martínez, J. Piulats and R. Trullas (Spain) 114

Loss of hippocampal CA1 neurons and learning impairment in subicular lesioned rats
Govindaiah, B.S.S. Rao, T.R. Raju and B.L. Meti (India) 121

Flumazenil reverses the decrease in the hypnotic activity of pentobarbital by social isolation stress: are endogenous benzodiazepine receptor ligands involved?
K. Ojima, K. Matsumoto and H. Watanabe (Japan) 127

Human auditory cortex is activated by omissions of auditory stimuli
T. Raij, L. McEvoy, J.P. Mäkelä and R. Hari (Finland) 134

Corticosterone alters G protein α-subunit levels in the rat hippocampus
D.Y. Okuhara, S.G. Beck and N.A. Muma (USA) 144

Interaction of cholecystokinin and somatostatin with a selective μ-opioid agonist and μ- and κ- antagonists in thermoregulation
S. Ghosh, E.B. Geller and M.W. Adler (USA) 152

Rats with decreased brain cholecystokinin levels show increased responsiveness to peripheral electrical stimulation-induced analgesia
L.-X. Zhang, X.-L. Li, L. Wang and J.-S. Han (People's Republic of China) 158

Granule cell disinhibition in dentate gyrus of genetically seizure susceptible El mice
T. Ono, Y. Fueta, N.A. Janjua, O. Ohmori, K. Ohno, Y. Murai and T. Mita (Japan) 165

Effect of morphine on striatal dopamine metabolism and ascorbic acid and uric acid release in freely moving rats
P. Enrico, G. Esposito, M.A. Mura, L. Fresu, G. De Natale, E. Miele, M.S. Desole and M. Miele (Italy) 173

Harmaline-induced tremor and impairment of learning are both blocked by dizocilpine in the rabbit
W. Du and J.A. Harvey (USA) 183

Membrane and synaptic properties of mitral cells in slices of rat olfactory bulb
W.R. Chen and G.M. Shepherd (USA) 189

(contents continued on p. 361)

0006-8993(19970116)745:1/2;1-0

BRAIN RESEARCH

VOL. 745 NOS. 1,2 **CONTENTS** **16 JANUARY 1997**

Cited in Biological Abstracts (BIOSIS) – Chem. Abstracts – Index Medicus (MEDLINE) – Current Contents (Life Sci.) – Excerpta Medica (EMBASE) – Psychological Abstracts (PsycINFO) – Pascal et Francis (INIST-CNRS) – RIS (Reference Update) – Current Awareness in Biological Science (CABS)

Publisher's Note v

Guidelines for the submission of manuscripts vii

Research reports

Low-affinity sulfonylurea binding sites reside on neuronal cell bodies in the brain
A.A. Dunn-Meynell, V.H. Routh, J.J. McArdle and B.E. Levin (USA) 1

[^{125}I]4-Aminobenzyl-5′-*N*-methylcarboxamidoadenosine ([^{125}I]AB-MECA) labels multiple adenosine receptor subtypes in rat brain
L.P. Shearman and D.R. Weaver (USA) 10

The association of tissue transglutaminase with human recombinant tau results in the formation of insoluble filamentous structures
D.M. Appelt and B.J. Balin (USA) 21

Ganglioside composition of the human cranial nerves, with special reference to pathophysiology of Miller Fisher syndrome
A. Chiba, S. Kusunoki, H. Obata, R. Machinami and I. Kanazawa (Japan) 32

The effect of estradiol-induced hypothalamic pathology on sulfated glycoprotein-2 (clusterin) expression in the hypothalamus
K.M. Wener, C.R. Morales and J.R. Brawer (Canada) 37

Activation of metabotropic glutamate receptors increases endogenous protein kinase C substrate phosphorylation in adult hippocampal slices
F. Angenstein, M. Hirschfelder and S. Staak (Germany) 46

Whole-cell NMDA-evoked current in suprachiasmatic neurones of the rat: modulation by extracellular calcium ions
S. Alberi, M. Dubois-Dauphin, J.J. Dreifuss and M. Raggenbass (Switzerland) 55

Subcellular localization of neuronal nitric oxide synthase in the brain of a teleost; an immunoelectron and confocal microscopical study
B. Holmqvist and P. Ekström (Norway, Sweden) 67

Contribution of sacral spinal cord neurons to the autonomic and somatic consequences of withdrawal from morphine in the rat
D.S. Rohde, W.R. McKay, C. Abbadie and A.I. Basbaum (USA) 83

Autoradiographic localization of 5-HT$_{1A}$ receptors in the post-mortem human brain using [^{3}H]WAY-100635 and [^{11}C]WAY-100635
H. Hall, C. Lundkvist, C. Halldin, L. Farde, V.W. Pike, J.A. McCarron, A. Fletcher, I.A. Cliffe, T. Barf, H. Wikström and G. Sedvall (Sweden, UK, The Netherlands) 96

The contribution of endogenous mono-ADP-ribosylation to kindling-induced epileptogenesis
K. Suzuki, H. Iwasa, S. Kikuchi, T. Sato, M. Miyake, N. Morinaga and M. Noda (Japan) 109

Effects of NMDA-R1 antisense oligodeoxynucleotide administration: behavioral and radioligand binding studies
A. Zapata, J.L. Capdevila, G. Tarrason, J. Adan, J.M. Martínez, J. Piulats and R. Trullas (Spain) 114

Loss of hippocampal CA1 neurons and learning impairment in subicular lesioned rats
Govindaiah, B.S.S. Rao, T.R. Raju and B.L. Meti (India) 121

Flumazenil reverses the decrease in the hypnotic activity of pentobarbital by social isolation stress: are endogenous benzodiazepine receptor ligands involved?
K. Ojima, K. Matsumoto and H. Watanabe (Japan) 127

Human auditory cortex is activated by omissions of auditory stimuli
T. Raij, L. McEvoy, J.P. Mäkelä and R. Hari (Finland) 134

Corticosterone alters G protein α-subunit levels in the rat hippocampus
D.Y. Okuhara, S.G. Beck and N.A. Muma (USA) 144

Interaction of cholecystokinin and somatostatin with a selective μ-opioid agonist and μ- and κ- antagonists in thermoregulation
S. Ghosh, E.B. Geller and M.W. Adler (USA) 152

Rats with decreased brain cholecystokinin levels show increased responsiveness to peripheral electrical stimulation-induced analgesia
L.-X. Zhang, X.-L. Li, L. Wang and J.-S. Han (People's Republic of China) 158

Granule cell disinhibition in dentate gyrus of genetically seizure susceptible El mice
T. Ono, Y. Fueta, N.A. Janjua, O. Ohmori, K. Ohno, Y. Murai and T. Mita (Japan) 165

Effect of morphine on striatal dopamine metabolism and ascorbic acid and uric acid release in freely moving rats
P. Enrico, G. Esposito, M.A. Mura, L. Fresu, G. De Natale, E. Miele, M.S. Desole and M. Miele (Italy) 173

Harmaline-induced tremor and impairment of learning are both blocked by dizocilpine in the rabbit
W. Du and J.A. Harvey (USA) 183

Membrane and synaptic properties of mitral cells in slices of rat olfactory bulb
W.R. Chen and G.M. Shepherd (USA) 189

(contents continued on p. 361)

0006-8993(19970116)745:1/2;1-0

(contents continued)

Anterograde tracing of retinohypothalamic afferents with Fluoro-Gold
S. Reuss and K. Decker (Germany) 197
Comparisons of the effects of enterostatin on food intake and gastric emptying in rats
L. Lin and D.A. York (USA) 205
Altered Na^+-channel function as an in vitro model of the ischemic penumbra: action of lubeluzole and other neuroprotective drugs
D. Ashton, R. Willems, J. Wynants, J. Van Reempts, R. Marrannes and G. Clincke (Belgium) 210
Implication of protein kinase C in mechanisms of potassium- induced long-term potentiation in rat hippocampal slices
M.-P. Roisin, X. Leinekugel and E. Tremblay (France) 222
Altered intracellular localization of the glutamate receptor channel δ2 subunit in weaver and reeler Purkinje cells
C. Takayama, S. Nakagawa, M. Watanabe, H. Kurihara, M. Mishina and Y. Inoue (Japan) 231
Effects of multiple intracerebroventricular injections of [D-Pen^2,D-Pen^5]enkephalin and [D-Ala^2,Glu^4]deltorphin II on tolerance to their analgesic action and on brain δ-opioid receptors
G.-M. Zhao and H.N. Bhargava (USA) 243
Amygdala-kindled seizures increase the expression of corticotropin-releasing factor (CRF) and CRF-binding protein in GABAergic interneurons of the dentate hilus
M.A. Smith, S.R.B. Weiss, R.L. Berry, L.-X. Zhang, M. Clark, G. Massenburg and R.M. Post (USA) 248
Brainstem-mediated locomotion and myoclonic jerks. I. Neural substrates
Y.Y. Lai and J.M. Siegel (USA) 257
Brainstem-mediated locomotion and myoclonic jerks. II. Pharmacological effects
Y.Y. Lai and J.M. Siegel (USA) 265
Instrumental conditioning of the activity of putative command neurons in the mollusk *Helix*
L.E. Tsitolovsky and A. Shvedov (Israel, Russia) 271
Characterization of the K^+ current mediated by 5-HT_{1A} receptor in the acutely dissociated rat dorsal raphe neurons
J. Katayama, T. Yakushiji and N. Akaike (Japan) 283
Calcium-binding proteins in the periglomerular region of typical and atypical olfactory glomeruli
C. Crespo, J.R. Alonso, J.G. Briñón, E. Weruaga, A. Porteros, R. Arévalo and J. Aijón (Spain) 293

Short communications

4-Aminopyridine and *l-cis*-diltiazem block the cGMP-activated K^+ channels closed by light in the molluscan extra-ocular photoreceptors
T. Gotow, T. Nishi and M. Murakami (Japan) 303
Power spectral analysis of inspiratory nerve activity in the anesthetized rat: uncorrelated fast oscillations in different inspiratory nerves
B. Kocsis and K. Gyimesi-Pelczer (Hungary) 309
Acute hypertension increases norepinephrine release in the diagonal band of Broca
S.L. Bealer (USA) 313
Intra-septal infusions of glucose potentiate inhibitory avoidance deficits when co-infused with the GABA agonist muscimol
M.B. Parent and P.E. Gold (USA) 317
Parabrachial nucleus neurons providing axons to both the thalamus and the spinal cord in the rat
J.-L. Li and N. Mizuno (Japan) 321
Effect of seizures and diuretics on the osmolality of the cerebrospinal fluid
J.L. Stringer and E. Pan (USA) 328
Low-dose amphetamine elevates movement-related firing of rat striatal neurons
M.O. West, L.L. Peoples, A.J. Michael, J.K. Chapin and D.J. Woodward (USA) 331
Dextrorphan, but not dextromethorphan, exerts weak antidystonic effects in mutant dystonic hamsters
A. Richter and W. Löscher (Germany) 336
Calcium channel types mediating synaptic transmission during aging
S.C. Hall and W.H. Griffith (USA) 339
Apoptosis in the striatum of rats following intraperitoneal injection of 3-nitropropionic acid
S. Sato, G.T. Gobbel, J. Honkaniemi, Y. Li, T. Kondo, K. Murakami, M. Sato, J.-C. Copin and P.H. Chan (USA) 343
Evidence for rhythmic firing being caused by feedback inhibition in pinch-inhibited raphe magnus neurons
I.D. Hentall and T.R. White (USA) 348
Preferential localization of monoamine oxidase type A activity in neurons of the locus coeruleus and type B activity in neurons of the dorsal raphe nucleus of the rat: a detailed enzyme histochemical study
R. Arai, H. Kimura, I. Nagatsu and T. Maeda (Japan) 352

Erratum

Expression of pituitary adenylate cyclase-activating polypeptide in dorsal root ganglia following axotomy: time course and coexistence (Brain Research 705 (1995) 149–158 (BRES 11829))
Q. Zhang, T.-J. Shi, R.-R. Ji, Y.-Z. Zhang, F. Sundler, J. Hannibal, J. Fahrenkrug and T. Hökfelt (Sweden, Denmark) 357

Author Index 358